Name:

at1121exam_practice: Radicals and Squares (v608)

Question 1

Simplify the radical expressions.

$\sqrt{63}$ $\sqrt{98}$ $\sqrt{27}$

Question 2

Find all solutions to the equation below:

$$3\left((x-10)^2+8\right) \;=\; 72$$

Question 3

By completing the square, find both solutions to the given equation. *You must show work for full credit!*

$$x^2 - 14x \;=\; -40$$

Question 4

A quadratic polynomial function is shown below in standard form.

$$y \;=\; 5x^2 - 40x + 77$$

Express the function in **vertex form** and identify the **location** of the vertex.